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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,310	01/21/2004	Hsin-Mao Hsieh	BHT-3215-68	1512
7590 08/16/2005			EXAMINER	
Troxell Law Office PLLC 5205 Leesburg Pike Suite 1404 Falls Church, VA 22041			ZEC, FILIP	
			ART UNIT	PAPER NUMBER
			3744	

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/760,310

Applicant(s)

HSIEH, HSIN-MAO

Examiner

Filip Zec

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,784,890 to Polkinghorne. In FIG. 1, Polkinghorne teaches a heat radiator comprising a water tank (62) having a hollow body (see FIG. 3), a cooling liquid (94, FIG. 3) contained in the hollow body; a first radiating member (38) having a top plate (42) secured at top edges of the water tank, multiple first fins (46) formed beneath the top plate and immersed in the cooling liquid (col 4, lines 28-29), a heat insulating pad adhered on the top plate (50), at least one semiconductor refrigerating component (30) mounted on the top plate and having a hot surface abutting the top plate and a cold surface exposed from the heat insulating pad (col 3, lines 2-3), a second radiating member (14) positioned on the first radiating member and having a bottom plate (18) with an area over the at least one semiconductor refrigerating component, and multiple second fins (22) formed on the bottom plate and a fan (col 4, lines 18-22) mounted on the second fins of the second radiating member.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,784,890 to Polkinghorne, in view of U.S. Patent 4,320,626 to Donnelly and U.S. Patent 5,007,242 to Nakayama. Polkinghorne discloses applicant's basic inventive concept, a heat radiator comprising a water tank, substantially as claimed with the exception of stating that said radiator further comprises a cover detachably mounted on the water tank, louvers defined at top and side surfaces of the cover, wherein the cover has a handle formed thereon, and that the cover has multiple hooks formed at bottom edges of the cover and respectively attached to the barbs. Donnelly shows a radiator (FIG. 1) comprising a cover (24, FIG. 1) detachably mounted on the water tank to envelop the second radiating member (88, FIG. 3) and the fan (56, FIG. 3), wherein the cover has a handle (42) formed thereon, to be old in the cooling art. Nakayama shows the use of louvers (21) defined at top and side surfaces of the cover, to be old in the cooling art. Also, Nakayama does not specify the use of barbs and hooks for attaching the top cover to the tank, however it teaches the use of a packing (26, FIG. 3) material for attaching said elements. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teaching of Donnelly and Nakayama to modify the system of Polkinghorne, by adding a cover detachably mounted on the water tank, louvers defined at top and side surfaces of the cover, wherein the cover has a handle formed thereon having a multiple

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and side surfaces of the cover, wherein the cover has a handle formed thereon having a multiple barbs to the top edges of the hollow body in order to have the radiator portable and multiple hooks to the bottom edges of the cover in order to provide a manner in which the top cover can be opened quicker for repair of the elements contained within the main compartment.

### *Allowable Subject Matter*

5. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 4,355,518 to Beitner, Shlomo teaches a refrigerator-vehicle combination method.

U.S. Patent 3,821,881 to Harkias, Alex teaches a refrigerator box with door mounted refrigeration unit.

U.S. Patent 4,970,868 to Grebe; Kurt R. et al. teaches an apparatus for temperature control of electronic devices.

U.S. Patent 5,299,424 to Woodson et al. teaches an aquarium heater and cooler.

U.S. Patent 4,306,613 to Christopher teaches a passive cooling system.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Filip Zec whose telephone number is (571) 272-4815. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Filip Zec

Examiner

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**CHERYL TYLER**

**SUPERVISORY PATENT EXAMINER**

FZ